

Amendments to the Specification:

Please replace paragraph beginning at line 20 of page 8 with the following amended paragraph:

There are several embodiments for embedding heat pipes 112 within or adjacent the thermoplastic layer 132 of the instrument panel 100. In one embodiment, the evaporator section 118 of each heat pipe 112 is directly integrated or adhered at the PVC layer 132. Structural brackets (e.g., brackets 113 shown in Figure 3) may be used around each heat pipe 112 to allow for differential thermal expansion between the dissimilar materials. In one such embodiment the evaporator section 118 of each heat pipe 112 is glued to the bottom of the PVC layer 132 with a thermal adhesive. Preferably, the number of heat pipes adhered to the bottom surface of the PVC layer 132 is sufficient to extend substantially across the width of the layer 132. In this regard, the heat pipes may also be placed into grooves or snaps formed along the bottom surface of the PVC layer 132, noting again that the grooves or snaps should allow for the differential thermal expansion between the heat pipes 112 and PVC materials. In some embodiments, the PVC is formed around the heat pipes.

Please replace paragraph beginning at line 9 of page 11 with the following amended paragraph:

An alternative embodiment of the present invention includes heat pipes having a ~~valve (not shown)~~ valve or valves 127 for sealing the evaporator section 118 from the condenser section 120. A closed valve 127 disrupts the transfer of heat from the instrument panel to the external environment by preventing the vapor from leaving the evaporator section of the heat pipes. As such, the vehicle's operator could manually control the transfer of heat from the instrument panel i.e., on a cooler day keep the absorbed solar energy within the vehicle passenger compartment. As shown in Figure 1, a manual switch 121 may provided to allow an operator to manually close a valve, such as via valve trigger or controller 125 linked to the valves 127. Alternatively, the valve or valves 127 could be triggered to close at certain preset instrument panel temperatures, or, alternatively, at certain preset passenger compartment air temperatures. A sensor 129 within the instrument panel or within the passenger compartment would sense the temperature and signal a computer or other decision

making device 123 (or, the trigger/controller 125) to open or close the valve as appropriate. ~~As such~~ For example, a valve 127 within each heat pipe would automatically close if the air temperature in the passenger compartment dropped below 20°C and reopen if the temperature elevated above 20°C.